

CLAIMS

1. A method for producing a worn article in which a pair of side panels each including two sheet-like materials and an elastic member sandwiched between the two sheet-like materials are attached to a main body portion, the method comprising the steps of:

feeding an elastic member between a pair of sheet-like materials along a flow direction of the pair of sheet-like materials so as to obtain a laminate to be the side panels;

cutting off the laminate at a predetermined interval in the flow direction to obtain cut panels;

changing an attitude of a pair of cut panels including two of the cut panels adjacent to each other to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction;

spacing the pair of cut panels apart from each other; and

attaching the pair of cut panels to a sheet-like member to be the main body portion, one on a left side and the other on a right side of the sheet-like member.

2. A method for producing a worn article in which a pair of side panels each including two sheet-like materials and an elastic member sandwiched between the two sheet-like materials are attached to a main body portion, the method comprising the steps of:

feeding an elastic member between a pair of sheet-like

materials along a flow direction of the pair of sheet-like materials so as to obtain a laminate to be the side panels;

cutting the laminate along a cut-off line extending in the flow direction to produce first and second divided laminates, which are separated from each other in a width direction of the sheet-like materials;

cutting each of the first and second divided laminates at a predetermined interval in the flow direction to obtain a left cut panel and a right cut panel;

spacing the first and second divided laminates apart from each other in the width direction or spacing the left and right cut panels apart from each other in the width direction;

changing an attitude of each cut panel to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction; and

attaching the left cut panel and the right cut panel, whose attitudes have been changed, on a left side and a right side, respectively, of a sheet-like member to be the main body portion.

3. A method for producing a worn article in which a pair of side panels each including two sheet-like materials and an elastic member sandwiched between the two sheet-like materials are attached to a main body portion, the method comprising the steps of:

feeding an elastic member between a pair of sheet-like materials along a flow direction of the pair of sheet-like materials so as to obtain a laminate to be the side panels;

cutting the laminate along a predetermined wave-shaped cut-off line extending in the flow direction to produce first and second divided laminates, which are separated from each other in a width direction of the sheet-like materials;

cutting the first divided laminate at a predetermined interval in the flow direction to obtain first cut panels;

changing an attitude of a pair of first cut panels including two of the first cut panels adjacent to each other to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction;

attaching the pair of first cut panels whose attitude has been changed to a sheet-like member to be the main body portion, one on a left side and the other on a right side of the sheet-like member;

cutting the second divided laminate at a predetermined interval in the flow direction to obtain second cut panels;

changing an attitude of a pair of second cut panels including two of the second cut panels adjacent to each other to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction; and

attaching the pair of second cut panels whose attitude has been changed to the sheet-like member to be the main body portion, one on the left side and the other on the right side of the sheet-like member.

4. A method for producing a worn article according to claim 1, 2 or 3, wherein the cut panel forms a side panel without being

trimmed.

5. A method for producing a worn article according to claim 1, 2 or 3, further comprising a step of attaching a fastening element to the laminate, the fastening element being used for fastening the side panels to the main body portion when the worn article is worn,

wherein in the step of cutting the laminate to obtain the cut panels, the fastening element, together with the laminate, is cut into two pieces so that each cut panel includes at least a cut-off fastening element.

6. A method for producing a worn article according to claim 1, 2 or 3, wherein non-contractile portions where a contractile force from the elastic member is not active are formed in the laminate at a predetermined interval in the flow direction, and, in the step of cutting the laminate to obtain the cut panels, the laminate is cut along each non-contractile portion so that each cut panel includes at least a part of the non-contractile portion.

7. A method for producing a worn article according to claim 1, 2 or 3, wherein in the step of feeding the elastic material to obtain the laminate to be the side panels, the elastic member is fed between the pair of sheet-like materials while the elastic member is being extended in the flow direction to produce the laminate, and

after producing the laminate, the elastic member of the laminate or the cut panels is relaxed so as to form gathers in the laminate or the cut panels.

8. A method for producing a worn article in which a pair of side panels are attached to a left side and a right side of a main

body portion, the method comprising the steps of:

cutting a continuous sheet-like laminate, which is being carried, along a cut-off line extending in a flow direction of the laminate to form first and second divided laminates, the cut-off line having a wave shape of a predetermined wavelength;

cutting the first divided laminate at a predetermined interval in the flow direction to produce, for every iteration of the wavelength, a first cut panel and a second cut panel being generally in line symmetry with each other;

cutting the second divided laminate at a predetermined interval in the flow direction to produce, for every iteration of the wavelength, a third cut panel and a fourth cut panel being generally in line symmetry with each other;

spacing the first cut panel and the second cut panel apart from each other in the flow direction;

spacing the third cut panel and the fourth cut panel apart from each other in the flow direction;

changing an attitude of each of the first and second cut panels to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction;

increasing a distance between the first cut panel and the second cut panel in a width direction of the laminate, which is generally perpendicular to the flow direction;

changing an attitude of each of the third and fourth cut panels to an attitude that is obtained by a rotation of about 90 degrees with respect to the flow direction;

increasing a distance between the third cut panel and the fourth cut panel in the width direction of the laminate;

attaching the first cut panel and the second or third cut panel on a left side and a right side, respectively, of a sheet-like member to be the main body portion; and

attaching the fourth cut panel and the third or second cut panel on the left side and the right side, respectively, of the sheet-like member to be the main body portion.

9. A method for producing a worn article according to claim 8, further comprising a step of aligning the first cut panel and the fourth cut panel with each other in the flow direction while aligning the second cut panel and the third cut panel with each other in the flow direction.

10. A method for producing a worn article according to claim 8, wherein in the step of cutting the continuous sheet-like laminate to form the first and second divided laminates, the divided laminates are formed with a phase of the first divided laminate being shifted from that of the second divided laminate in the flow direction by one half of the wavelength.

11. A worn article, comprising a main body portion including an absorbent core and covering a front torso area, a crotch area and a rear torso area of a wearer, and a pair of side panels attached to the main body portion and located between the front and rear torso areas when the worn article is worn, wherein each of the side panels is stretchable in an around-the-torso direction,

wherein at least a portion of the side panel is formed by

sandwiching an elastic thread between at least two sheet-like materials and is in a contracted state where the elastic thread is contracted in the around-the-torso direction to form gathers.

12. A worn article according to claim 11, wherein a first non-contractile portion where a contractile force from the elastic thread is not active is provided in a portion of the side panel that is joined to the main body portion, and the first non-contractile portion is laid over and attached to the main body portion.

13. A worn article according to claim 11, wherein a second non-contractile portion where a contractile force from the elastic thread is not active is provided in a tip portion of the side panel in the around-the-torso direction, and a fastening element is attached to the second non-contractile portion, the fastening element being used for fastening the side panels to the main body portion when the worn article is worn.